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2nd
Avalanche
NotesU.S. Forest Service
Westwide Avalanche Network

4/17/89

MARCH, 1978

5-337860

4/6/90

In March the stormtrack favored the southwestern U.S., from southern California to northern New Mexico and southern Colorado. Stations in this region all recorded above normal snowfall: Mammoth Mountain, 180%; Aspen, 154%; Vail, 160%; and Taos, 130%. Farther north, snowfall was slightly below normal: Alpine Meadows, 83%; Alta, 98%; and Berthoud Pass, 98%. And farther north still, snowfall was much below normal: Jackson Hole, 35%; Bridger Bowl, 48%; Sun Valley, 57%; Crystal Mountain, 19%; and Mt. Rainier-Paradise, Stevens Pass, Mt. Baker, all 34%. It has indeed been a mostly dry winter in the Cascades of Oregon and Washington, and the winter's avalanche totals from this region are down markedly. For December through March, the heaviest and lightest total snowfalls at Westwide Avalanche Network sites both come from Alaska. Alyeska received 501 inches during this period, and Eaglecrest, a mere 75.5 inches.

From February 26 - March 7, a major snowstorm raged in the southern and central Colorado mountains. Elkton received 116 inches of snow during this 10-day storm, certainly a record for Colorado in recent years. Avalanche warnings were raised during this storm, and two accidents did occur: an unoccupied cabin was damaged by a massive avalanche at Gothic, and car was struck on Wolf Creek Pass but with no injury.

Around the West, there were no major avalanche accidents for the month. The winter's avalanche statistics through March are tabulated below:

Area	Total Avalanches Reported			Damage Summary - This Winter							
	This Month	This Winter	C	People	Vehicles	Avalanche Damaged					
			B	I	B	Bldgs	Lifts	Misc.			
Central and So.											
Rockies	747	2273	34	13	3	4	6	2	1	10	2
Intermountain	448	2482	42	13	3	0	0	0	0	0	0
West Coast	842	4736	41	21	3	8	12	3	4	12	0
All Areas	2037	9491	117	47	9	12	18	5	5	2	2

HOA
AVALANCHE
SURVEY
REPORT

44

343



MARCH 1978

SUMMARY OF WEATHER AND SNOW CONDITIONS

SNOWFALL				WATER EQUIVALENT				SNOW DEPTH				TEMPERATURE				WIND SPEED AND DIRECTION			
MAX	IN.	IN.	IN.	MAX	IN.	IN.	IN.	MAX	IN.	IN.	IN.	MEAN	MEAN	MEAN	MEAN	6 HOUR FOR PERIODS	D	A	D
TOTAL	IN.	IN.	IN.	TOTAL	24	A	D	A	24	A	D	MAX	MIN	MAX	MIN	FASTEST	A	GE	GE
SNOW- FALL	24	A	D	WATER	HR.	T	HR.	T	GE	GE	GE	MAX	T	MIN	AVG	HR.	T	GE	GE
Avg	IN.	IN.	IN.	Avg	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	MO.	HR.	HR.	HR.
AREA	IN.	IN.	IN.	Den.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	15	20	15	20
																MPH	MPH	MPH	MPH

CENTRAL AND SOUTHERN ROCKY MOUNTAINS

ARAPAHO BASIN, COLO	42.5	7	3	4.94	.79	3	14	11	3	0	77	20	59	68	31.8	18.4	25.1	8.7	4	1	27	180	12			
ASPEN MOUNTAIN, COLO	69.0	.07	12	3	4.94	.79	3	14	11	3	0	77	20	59	68	31.8	18.4	25.1	8.7	4	1	27	180	12		
BEAR LAKE, RMNP, CO	38.5	.10	9	13	3.87	1.30	1	9	6	2	1	63	13	52	58	58	58	58	58	58	58	58	58	58	58	
BERTHOUD PASS, COLO	53.0	.07	10	3	3.83	.68	3	14	9	1	0	79	4	68	74	33.4	12.2	22.8	15.2	62	26	39	300	16		
BERTHOUD-MINES PEAK	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
BRECKENRIDGE, COLO	56.5	.08	12	3	4.35	.85	3	12	8	3	0	99	4	82	92	35.7M	16.0	25.9M	14.1M	58M	31M	45	190	1		
CAMP BIRD MINE, COLO	89.0	.07	17	13	5.80	1.20	6	10	9	5	2	—	—	—	—	—	—	—	—	—	—	—	—	—		
COPPER MTN COLO	52.0	.08	9	2	4.03	.70	2	15	10	2	0	77	3	65	71	36.4	10.8	23.6	9.0M	17M	2M	2A	330	15		
ELKTON, COLORADO	120.5	.09	17	6	10.29	1.75	2	14	12	9	4	140	6	101	117	42.4	16.7	29.5	—	—	—	—	—	—	—	
GENEVA BASIN, CO	29.5	.06	7	3	1.78	.55	3	6	3	1	0	58	3	49	53	35.4	15.1	25.2	—	—	—	—	—	—	—	
GOTHIC, COLO	96.0	.07	17	2	7.00	1.35	2	14	11	6	1	102	6	74	86	23.8	10.0	16.9	—	—	—	—	—	—	—	
KEYSTONE, COLO	37.0	.08	6	3	2.96	.40	3	13	10	0	0	55	7	42	49	34.5	13.3	23.9	7.7M	8M	1M	—	—	—	—	
LOVELAND PASS U.S. 6	45.5	.08	10	3	3.51	.85	3	13	6	1	0	73	4	60	67	33.5	12.1	22.8	—	—	—	—	—	—	—	
MONARCH, COLORADO	57.0	.08	10	2	4.78	1.25	2	14	11	3	1	69	6	53	62	30.9M	11.1	21.0M	—	—	—	—	—	—	—	
RABBIT EARS PASS, CO	80.5	—	21	14	—	—	—	—	—	—	—	131	15	102	116	—	—	—	—	—	—	—	—	—	—	
RED MTN PASS U.S. 550	85.0	.09	10	12	7.45	.85	2	17	13	7	0	110	13	91	101	30.8	10.1	20.5	—	—	—	—	—	—	—	
SUNLIGHT, COLORADO	70.0	—	12	6	—	—	—	—	—	—	—	76	14	58	66	37.6	21.2	29.4	—	—	—	—	—	—	—	
TAOS, NEW MEXICO	63.5	.09	16	3	5.86	1.80	3	11	10	4	2	87	14	56	75	31.4	17.3	24.3	13.9	63	30	45	220	1		
TELLURIDE, COLO	66.5	.06	8	2	3.97	.50	2	14	11	1	0	64	14	46	56	31.2	15.7	23.5	—	—	—	—	—	—	—	
VAIL, COLO	101.0	.08	14	4	7.70	1.40	4	14	13	6	1	118	15	100	109	32.8	15.0	23.9	7.4	3	0	25	300	3		
WINTER PARK 1E, COLO	41.5	.06	10	3	2.61	.62	3	11	5	1	0	54	3	40	47	36.5	13.0	24.7	—	—	—	—	—	—	—	
WOLF CREEK PASS, US	160	92.0	10	16	1	9.52	1.90	1	11	10	7	5	116	6	86	104	41.4M	15.1M	28.2M	—	—	—	—	—	—	—

-- DATA INCOMPLETE OR MISSING
-- ONE OR MORE DAYS OF RECORD MISSING--IF AVERAGE VALUE IS ENTERED, LESS THAN 10 DAYS RECORD IS MISSING
-- IF M IS ENTERED--IN WIND SHEED--COLUMN, LESS THAN 37.6--HOUR PERIODS ARE MISSING
-- GE--GREATER THAN OR EQUAL TO

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

MARCH 1978

SUMMARY OF WEATHER AND SNOW CONDITIONS

AREA	SNOWFALL				WATER EQUIVALENT				SNOW DEPTH				TEMPERATURE				WIND SPEED AND DIRECTION				
	TOTAL SNOW-FALL	IN.	IN.	IN.	D	NUMBER OF DAYS	D	D	MAX T	MIN T	AVG T	IN.	MAX F	MIN F	AVG F	DEGREES F	Avg FOR MO.	6 HOUR PERIODS GE	FASTEST GE	D	
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	MPH	MPH	MPH DIR.	
INTERMOUNTAIN																					
ALTA, UTAH	85.0	.11	13	6	9.36	1.10	3	14	13	9	131	7	96	113	38.1	19.5	28.8	--	--	--	
BRIDGER BOWL, MONT	29.5	.06	10	15	1.91	1.05	24	3	2	1	99	2	77	90	39.1M	21.3M	30.2M	14.3	59	31	
GRAND TARGHEE, WYO	35.0	.08	8	13	2.80	.65	10	8	5	4	0	103	13	80	93	37.9M	23.9M	30.9M	--	--	
JACKSON HOLE, WYO	24.5	.08	5	5	2.08	.42	14	8	5	0	124	14	98	113	28.7	18.3	23.5	15.3M	53M	33M	
SLIDE MT., NEVADA	35.5	--	10	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SNOWBIRD, UTAH	81.5	.12	14	5	9.90	1.58	5	13	11	8	4	122	6	81	104	40.0	22.5	31.3	19.7M	86M	
SUN VALLEY, IDAHO	16.5	.11	7	5	1.82	1.00	5	4	2	1	77	5	58	67	39.0	21.3	30.2	8.4	19	6	
TON PASS, WYO	24.0	.10	10	13	2.51	1.00	13	5	4	2	1	--	--	--	35.5M	21.1M	28.3M	--	--	--	
WEST COAST																					
ALPENTAL, WASH	38.0	.10	16	14	3.96	1.48	14	8	7	2	1	96	14	64	78	43.1	30.9	37.0	--	--	
ALPINE MEADOWS, CAL	44.0	.16	14	5	7.07	2.08	5	12	10	3	2	129	6	103	114	46.0	30.3	38.1	11.0	33	
ALYESKA, ALASKA	122.0	.08	18	15	9.19	1.50	16	13	11	8	4	180	16	144	161	28.4M	20.1M	24.2M	5.3M	7M	
CARSON PASS, CALIF	88	75.5	.09	26	5	6.98	2.82	5	11	7	4	2	128	5	94	109	47.5	28.3	37.9	15.2M	43M
CRYSTAL MTN 1, WASH		10.7	.07	5	1	3.09	.76	7	6	5	2	0	48	1	28	39	41.3	26.2	33.7	13.0	49
CRYSTAL MTN 2, WASH		20.1	.13	6	7	2.63	.95	7	9	3	2	0	90	12	75	83	34.7	25.2	29.9	13.0	49
EAGLECREST, ALASKA	28.0	--	4	18	--	--	--	--	--	--	--	--	47	26	36	32.7M	21.9M	19.1M	71M	53M	
HEAVENLY VALLEY, CAL	57.0	--	20	5	--	--	--	--	--	--	--	--	105	5	86	94	--	--	--	--	--
MAMMOTH MTN, CALIF	85.5	.11	20	4	9.50	2.10	4	13	13	7	3	180	5	137	157	37.9	25.6	31.8	6.1	22	
MISSION RIDGE, WASH	3.5	.19	2	7	.68	.50	7	2	1	0	52	4	30	44	41.7	26.1	33.9	8.3	20	3	
MT. BAKER, WASH	41.2	.19	12	25	13.13	3.00	25	13	11	7	5	134	25	116	124	--	--	9.6M	28M	8M	
MT. RAINIER PARADISE	42.2	.12	7	4	6.38	.81	7	14	10	6	0	152	14	129	141	38.9M	26.6M	32.8M	8.3M	5M	
PINE CREEK MILL, CAL	16.0	.06	12	4	.92	.42	3	3	2	0	0	38	4	0	14	42.7	28.9	35.8	3.0	0	
SQUAW VALLEY, CALIF	62.0	.18	12	3	11.55	2.45	4	12	12	8	4	185	6	157	169	51.5M	28.3	39.9M	--	--	
STEVENS PASS, WASH	28.0	.08	8	14	3.81	.85	24	11	6	2	0	99	15	75	87	39.1	27.5	33.3	7.7	1	
STEVENS PASS 5E, WASH	32.0	.09	14	14	3.33	.85	24	7	7	2	0	111	14	78	94	39.8	28.2	34.0	10.1M	14M	
SUGAR BOWL, CALIF	33.0	--	12	3	--	--	--	--	--	--	--	--	136	5	98	119	44.2M	34.8M	14.3M	72M	24M

MARCH 1978
AVALANCHE SUMMARY

CENTRAL AND SOUTHERN ROCKY MOUNTAINS

ASPEN HIGHLANDS, COLO	17	31	2	26	4	3+	8	0	15	2	3	2	0	12	5	0	0	11	5	4	2600	0	
ASPEN MOUNTAIN, COLO	7	8	4	31	6	31	2	0	7	0	0	0	0	7	1	0	0	5	0	0	300	0	
ASPEN SNOWMASS, COLO	15	31	3	31	8	4	5	5	12	3	0	7	0	8	6	6	0	13	1	0	500	0	
BERTHOUD PASS, COLO	64	265	6	31	25	7	10	4	11	53	18	26	0	20	28	2	1	49	17	1	1000	0	
BERTHOUD PASS U.S. 40	9	21	7	31	7	7	3	0	0	9	0	3	1	5	3	0	0	8	4	1	1600	0	
BRECKENRIDGE, COLO	14	107	2	25	4	20	6	12	14	0	1	13	0	0	1	0	0	13	0	0	325	0	
CAMP BIRD MINE, COLO	7	16	1	31	4	30	4	9	0	7	0	0	6	1	0	0	0	1	1	1	1000	5	
CLIMAX-COLO HWY 91	7	7	8	24	2	24+	5	1	0	7	0	2	1	4	1	0	0	0	0	0	0	150	1
COLO HIGHWAY 110	9	13	31	31	9	31	1	0	0	9	0	0	4	5	3	3	0	9	9	7	3000	1	
COPPER MT, COLO	11	39	3	17	5	5	5	4	9	2	2	9	0	0	3	1	0	9	6	0	750	0	
EKTON, COLORADO	8	27	4	16	4	16	4	0	0	8	0	0	3	1	4	3	2	2	2	2	2300	0	
GENEVA BASIN, COLO	25	54	1	28	4	24	14	0	20	5	3	15	3	4	5	1	0	12	4	0	600	0	
GOTHIC, COLO	192	476	1	31	25	3	27	4	0	192	3	124	1	64	99	18	4	190	148	82	3250	0	
IDARADO MINE, COLO	2	2	7	7	2	7	1	0	2	0	0	0	2	0	2	1	0	2	2	2	2300+	0	
LIZARD HD PASS, COLO	3	7	2	30	1	30+	3	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	
LOVELAND BASIN, COLO	2	32	4	30	1	30+	2	0	1	0	2	0	0	2	0	0	1	0	0	0	200	0	
LOVELAND PASS U.S. 6	48	165	1	31	15	7	12	4	3	45	1	13	3	31	9	0	0	32	14	5	1050	6	
MONARCH, COLORADO	20	68	3	31	6	14	11	16	1	19	2	10	0	8	8	3	2	14	2	0	500	1	
OPHIR, COLORADO	2	39	7	7	2	7	1	0	2	0	0	0	2	0	2	2	0	2	2	2	2400	0	
RED MTN PASS U.S. 550	109	310	1	31	19	2	15	2	20	89	0	37	4	64	19	9	0	72	46	13	2300	47	
SILVERTON, COLO	5	19	21	31	2	31	4	0	0	5	0	0	1	4	1	0	0	4	4	4	2116	0	
STEAMBOAT SPRINGS, CO	7	36	1	25	3	4+	3	3	7	0	1	4	0	2	1	0	0	6	5	0	675	0	
SUNLIGHT, COLORADO	12	37	2	24	3	24	6	1	11	1	0	11	0	1	0	0	0	0	0	0	180	0	
TAOS, NEW MEXICO	131	295	2	31	63	3	10	4	117	14	33	92	6	0	95	20	6	124	83	2	1400	0	
TELLURIDE, COLO	4	29	1	31	2	31	3	0	2	2	1	2	0	1	2	2	1	3	2	1	1500	0	
URAD MINE, COLO	10	17	7	31	4	7	5	0	1	9	4	5	0	1	6	4	1	10	9	3	2000	1	
VAIL, COLO	4	16	3	29	2	14	3	6	3	1	0	2	0	2	2	0	1	1	0	0	500	0	
WOLF CRK PASS U.S. 160	3	6	6	3	6	6	3	1	2	0	2	1	0	2	1	0	0	1	0	0	0	300	0

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

MARCH 1978
AVALANCHE SUMMARY

		TOTAL		TOTAL		DATES OF		NUMBER OF DAYS WITH		TYPE OF AVALANCHE		FRACTURE LINE HEIGHTS IN FEET		VERTICAL DESCENT IN FEET				
		A	V	A	V	A	L	A	V	A	N	A	R	A	SLABS	L	AVAILABILITY ACROSS MAJOR ACCESS ROADS	NUMBER FEET NO.
THIS	WINTER	I	L	R	A	ONE	A	MAX	IN	D	U	I	U	F	R	A	0	0
MONT	WINTER	S	S	S	S	DAY	F	S	S	S	S	C	A	R	F	E	S	GE GE GF
AREA	NO.	1	1	1	1	NU.	E	NU.	NU.	NU.	NU.	L	L	D	T	T	E	2 4 6 200 500 1000 NUMBER

INTERMOUNTAIN

ALTA, UTAH	112	535	2	25	18	5	11	0	111	1	5	107	0	0	28	1	112	72	12 1200 1
BIG SKY, MONT	95	494	1	31	22	6	14	1	74	21	4	73	2	16	15	2	92	47	6 1100 0
BRIDGER BOWL, MONT	34	200	8	31	11	15	8	0	28	6	0	14	0	20	2	0	33	26	12 2000 0
JACKSON HOLE, WYO	37	430	4	28	22	13	7	0	33	4	0	33	0	4	0	0	36	0	0 400 0
SLIDE Mtn, NEVADA	4	9	3	5	3	3	2	4	4	0	0	4	0	0	1	0	4	4	1 1000 0
SNOW BASIN, UTAH	21	29	5	14	8	10	6	3	18	3	0	21	0	0	7	0	0	0	0 150+ 0
SNOWBIRD, UTAH	122	675	3	31	36	5	13	0	104	18	4	103	0	15	25	2	1	93	63 27 1500 0
WASATCH RANGE, UTAH	23	40	5	15	15	5	6	0	4	19	4	19	0	0	21	2	1	21	17 7 2200+ 0

---=DATA INCOMPLETE OR MISSING

GE=GREATER THAN OR EQUAL TO

*=ALSO OCCURRED ON OTHER DATES

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

MARCH 1978
AVALANCHE SUMMARY

		TOTAL		TOTAL		DATES OF		NUMBER OF DAYS WITH		TYPE OF AVALANCHE		FRACTURE LINE HEIGHTS IN FEET		VERTICAL DESCENT IN FEET		AVAILABILITY ACROSS MAJOR ACCESS ROADS												
		A	V	A	L	S	F	A	V	A	L	A	U	H	S	A	R	T	U	F	R	A	W	O	GE	GE	GE	MAX FEET
		THIS MONTH	THIS WINTER	THIS MONTH	WINTER	NO.	NO.	R	L	I	L	MAX	IN	D	ONE	A	S	F	C	A	R	F	E	S	GE	GE	GE	200 500 1000
		AREA																										
WEST COAST																												
ALPENTAL, WASH		71	386	4	25	36	14	6	0	59	12	0	67	4	0	6	0	0	54	0	0	0	0	0	0	450	0	
ALPINE MEADOWS, CAL		360	1842	2	27	98	3	10	0	354	6	2	320	13	0	57	0	0	247	47	0	800	0	0	0	0		
ALYESKA, ALASKA		48	326	8	15	20	8	6	2	48	0	1	47	0	0	8	1	0	24	20	11	1600	0	0	0	0		
CARSON PASS, CALIF		27	166	3	11	14	4	5	1	21	6	2	23	0	2	0	0	0	22	10	0	600	27	0	0	0		
CRYSTAL Mtn, WASH		5	39	2	21	2	8	4	0	3	2	0	3	0	2	1	0	0	5	3	0	600	0	0	0	0		
EAGLECREST, ALASKA		5	37	22	22	5	22	1	0	5	0	0	5	0	0	0	0	0	3	0	0	0	0	0	0	250	0	
HEAVENLY VALLEY, CAL		17	51	4	5	11	4	2	0	15	2	0	17	0	0	4	0	0	16	13	10	1200	0	0	0	0		
JUNE MOUNTAIN, CALIF		21	85	2	10	12	4	6	6	21	0	3	16	0	2	8	1	0	11	1	1	1200	0	0	0	0		
KIRKWOOD MDWS, CAL		63	183	3	6	26	5	4	5	45	18	5	51	7	0	49	2	0	56	28	10	1200+	0	0	0	0		
MAMMOTH Mtn, CALIF		15	245	6	10	13	6	3	4	13	2	0	15	0	0	7	0	0	13	7	2	1100	0	0	0	0		
MISSION RIDGE, WASH		15	94	7	25	8	25	2	3	8	7	0	15	0	0	1	0	0	5	0	0	300	0	0	0	0		
MT. SHASTA, CALIF		12	23	5	28	10	5	3	0	0	12	0	0	12	0	11	0	0	12	9	5	3200	0	0	0	0		
PINE CREEK MILL, CAL		9	29	3	4	7	4	2	0	0	9	0	0	9	0	0	9	0	9	9	9	73000	2	0	0	0		
SQUAW VALLEY, CALIF		100	569	2	6	42	3	5	0	95	5	0	77	23	0	46	6	3	100	25	7	1500	0	0	0	0		
STEVENS PASS, WASH		54	377	1	28	22	25	4	1	48	6	0	17	4	33	9	0	0	39	12	1	1000	0	0	0	0		
STEVENS PASS U.S. 2		7	98	8	14	6	14	2	0	5	2	0	6	0	1	1	0	0	7	3	1	1200	0	0	0	0		
SUGAR BOWL, CALIF		13	69	2	5	9	3	3	1	13	0	0	13	0	0	1	0	0	4	0	0	250	0	0	0	0		

--=DATA INCOMPLETE OR MISSING

GE=GREATER THAN OR EQUAL TO

*=ALSO OCCURRED ON OTHER DATES

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